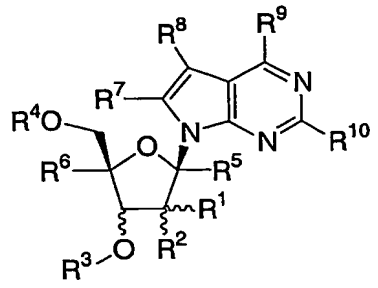
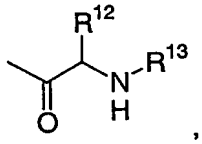
WHAT IS CLAIMED IS:

1. A compound of structural formula I:



(I)

or a pharmaceutically acceptable salt thereof;
wherein R^1 is C_{1-4} alkyl, wherein alkyl is unsubstituted or substituted with hydroxy, amino, C_{1-4} alkoxy, C_{1-4} alkylthio, or one to three fluorine atoms;
R^2 is amino, fluorine, hydroxy, C_{1-10} alkylcarbonyloxy, mercapto, or C_{1-4} alkoxy;
R^3 and R^4 are each independently hydrogen, C_{1-16} alkylcarbonyl, C_{2-18} alkenylcarbonyl, C_{1-10} alkyloxycarbonyl, C_{3-6} cycloalkylcarbonyl, C_{3-6} cycloalkyloxycarbonyl, $CH_2O(C=O)C_{1-4}$ alkyl, $CH(C_{1-4}$ alkyl$)O(C=O)C_{1-4}$ alkyl, or an amino acyl residue of structural formula



with the proviso that at least one of R^3 and R^4 is not hydrogen;
R^5 and R^6 are each independently hydrogen, methyl, hydroxymethyl, or fluoromethyl;
R^7 is hydrogen, C_{1-4} alkyl, C_{2-4} alkynyl, halogen, cyano, carboxy, C_{1-4} alkyloxycarbonyl, azido, amino, C_{1-4} alkylamino, di(C_{1-4} alkyl)amino, hydroxy, C_{1-6} alkoxy, C_{1-6} alkylthio, C_{1-6} alkylsulfonyl, or (C_{1-4} alkyl)$_{0-2}$ aminomethyl;
R^8 is hydrogen, cyano, nitro, C_{1-3} alkyl, $NHCONH_2$, $CONR^{11}R^{11}$, $CSNR^{11}R^{11}$, $COOR^{11}$, $C(=NH)NH_2$, hydroxy, C_{1-3} alkoxy, amino, C_{1-4} alkylamino, di(C_{1-4} alkyl)amino, halogen, (1,3-oxazol-2-yl), (1,3-thiazol-2-yl), or (imidazol-2-yl); wherein

alkyl is unsubstituted or substituted with one to three groups independently selected from halogen, amino, hydroxy, carboxy, and C_{1-3} alkoxy;

R^9 is hydrogen, hydroxy, mercapto, halogen, C_{1-4} alkoxy, C_{1-4} alkylthio, C_{1-8} alkylcarbonyloxy, C_{3-6} cycloalkylcarbonyloxy, C_{1-8} alkyloxycarbonyloxy, C_{3-6} cycloalkyloxycarbonyloxy, $OCH_2CH_2SC(=O)C_{1-4}$ alkyl, $OCH_2O(C=O)C_{1-4}$ alkyl, $OCH(C_{1-4}$ alkyl$)O(C=O)C_{1-4}$ alkyl, amino, C_{1-4} alkylamino, di(C_{1-4} alkyl)amino, C_{3-6} cycloalkylamino, or di(C_{3-6} cycloalkyl)amino;

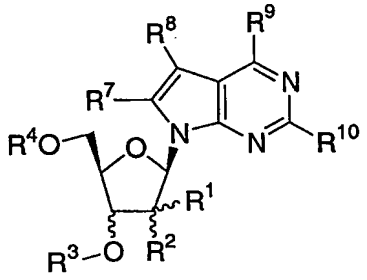
R^{10} is hydrogen, hydroxy, halogen, C_{1-4} alkoxy, amino, C_{1-4} alkylamino, di(C_{1-4} alkyl)amino, C_{3-6} cycloalkylamino, or di(C_{3-6} cycloalkylamino);

each R^{11} is independently hydrogen or C_{1-6} alkyl;

R^{12} is hydrogen, C_{1-4} alkyl, or phenyl C_{0-2} alkyl; and

R^{13} is hydrogen, C_{1-4} alkyl, C_{1-4} acyl, benzoyl, C_{1-4} alkyloxycarbonyl, phenyl C_{0-2} alkyloxycarbonyl, C_{1-4} alkylaminocarbonyl, phenyl C_{0-2} alkylaminocarbonyl, C_{1-4} alkylsulfonyl, or phenyl C_{0-2} alkylsulfonyl.

2. The compound of Claim 1 of structural formula II:



(II)

or a pharmaceutically acceptable salt thereof;

wherein

R^1 is C_{1-3} alkyl, wherein alkyl is unsubstituted or substituted with hydroxy, amino, C_{1-3} alkoxy, C_{1-3} alkylthio, or one to three fluorine atoms;

R^2 is hydroxy, amino, fluoro, or C_{1-3} alkoxy;

R^3 and R^4 are each independently hydrogen, C_{1-8} alkylcarbonyl, or C_{3-6} cycloalkylcarbonyl, with the proviso that at least one of R^3 and R^4 is not hydrogen;

R^7 is hydrogen, amino, or C_{1-4} alkylamino;

R^8 is hydrogen, cyano, methyl, halogen, or $CONH_2$; and

R^9 and R^{10} are each independently hydrogen, halogen, hydroxy, or amino.

3. The compound of Claim 2 wherein
R^1 is methyl, fluoromethyl, hydroxymethyl, difluoromethyl, trifluoromethyl, or aminomethyl;
R^2 is hydroxy, amino, fluoro, or methoxy;
R^3 and R^4 are each independently hydrogen or C_{1-8} alkylcarbonyl, with the proviso that at least one of R^3 and R^4 is not hydrogen;
R^7 is hydrogen or amino;
R^8 is hydrogen, cyano, methyl, halogen, or $CONH_2$; and
R^9 and R^{10} are each independently hydrogen, fluoro, hydroxy, or amino.

4. The compound of Claim 1 selected from the group consisting of:
4-amino-7-[2-*C*-methyl-3,5-di-*O*-(1-oxo-octyl)-β-D-ribofuranosyl]-7*H*-pyrrolo[2,3-*d*]pyrimidine;
4-amino-7-[2-*C*-methyl-3-*O*-(1-oxo-octyl)-β-D-ribofuranosyl]-7*H*-pyrrolo[2,3-*d*]pyrimidine;
4-amino-7-[2-*C*-methyl-5-*O*-(1-oxo-octyl)-β-D-ribofuranosyl]-7*H*-pyrrolo[2,3-*d*]pyrimidine; and
4-amino-7-[2-*C*-methyl-2,3,5-tri-*O*-(1-oxo-octyl)-β-D-ribofuranosyl]-7*H*-pyrrolo[2,3-*d*]pyrimidine;
or a pharmaceutically acceptable salt thereof.

5. A pharmaceutical composition comprising a compound of Claim 1 and a pharmaceutically acceptable carrier.

6. The pharmaceutical composition of Claim 5 useful for inhibiting RNA-dependent RNA viral polymerase, inhibiting RNA-dependent RNA replication, and/or treating RNA-dependent RNA viral infection.

7. The pharmaceutical composition of Claim 6 wherein said RNA-dependent RNA viral polymerase is HCV NS5B polymerase, said RNA-

dependent RNA viral replication is HCV replication, and said RNA-dependent RNA viral infection is HCV infection.

8. A method of inhibiting RNA-dependent RNA viral polymerase and/or inhibiting RNA-dependent RNA viral replication comprising administering to a mammal in need of such inhibition an effective amount of a compound according to Claim 1.

9. The method of Claim 8 wherein said RNA-dependent RNA viral polymerase is HCV NS5B polymerase and said RNA-dependent RNA viral replication is HCV viral replication.

10. A method of treating RNA-dependent RNA viral infection comprising administering to a mammal in need of such treatment an effective amount of a compound according to Claim 1.

11. The method of Claim 10 wherein said RNA-dependent RNA viral infection is HCV infection.

12. The method of Claim 11 in combination with a therapeutically effective amount of another agent active against HCV.

13. The method of Claim 12 wherein said agent active against HCV is a 2'-*C*-Me-ribonucleoside; ribavirin; levovirin; thymosin alpha-1; interferon-β; an inhibitor of NS3 serine protease; an inhibitor of inosine monophosphate dehydrogenase; interferon-α or pegylated interferon-α, alone or in combination with ribavirin or levovirin.

14. The method of Claim 13 wherein said agent active against HCV is interferon-α or pegylated interferon-α, alone or in combination with ribavirin.

15. Use of a compound of Claim 1 for the inhibition of RNA-dependent RNA viral polymerase or inhibition of RNA-dependent RNA viral replication in a mammal.

16. Use of a compound of Claim 1 for treatment of RNA-dependent RNA viral infection in a mammal.

17. The use of Claim 16 wherein said RNA-dependent RNA viral infection is hepatitis C infection.

18. Use of a compound of Claim 1 in the manufacture of a medicament for the inhibition of RNA-dependent RNA viral polymerase or the inhibition of RNA-dependent RNA viral replication in a mammal.

19. Use of a compound of Claim 1 in the manufacture of a medicament for treatment of RNA-dependent RNA viral infection in a mammal.

20. The use of Claim 19 wherein said RNA-dependent RNA viral infection is hepatitis C infection.